

Migrations of *Athena chiron* Fabricius

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Throughout the greater part of tropical and subtropical America *Athena chiron* is, at certain seasons, one of the most abundant butterflies. It may often be seen congregated in large numbers at puddles or wet spots of ground to sip moisture. During our stay at Cordoba, Mexico, Dr. Fenyès and the writer witnessed an extensive migration of this species. Our observations extended over four days, May 15-18, 1908, and were brought to a close by the departure of the writer. It is to be supposed that the migration continued for some time after, while the conditions prevailed which favored it. The butterflies did not form a swarm but were traveling independently. Numbers of them could be seen scattered over the countryside, many of them flying in a northeasterly direction, while others hovered about bushes and herbage or about moist places. In town they could be seen rapidly passing over, just above the roofs of the houses. There were some almost constantly in sight from our station in the courtyard of our hotel. The flights ceased during periods of cloudiness, only to be resumed when the sun again appeared.

The appearance of these butterflies at Cordoba in such large numbers was due to their sudden development in the adjoining hot, low regions as a result of the first rains of the warm season. The steady currents of heated air, passing up the mountain sides from the valley of the Rio Blanco, carried these butterflies along with them. It would therefore seem that the migration was due to natural causes rather than to any purpose or migratory instinct on the part of the insect.

Godman and Salvin observed a migration of a like character, and under similar conditions, in this same species of butterfly, near San Geronimo, in Guatemala. As their account, in the *Biologia-Centrali Americana* (Lepid, Rhopal., vol. I, p. 289) is accessible to but few readers, I quote it here:

"We were riding one afternoon down the mountain side skirting the plain of Salama, when we met thousands of this species, which were flying with the wind along the hillside. All were going in the same direction, which took them to the higher ranges of this district, and beyond into the valleys of the Polochic and Motagna."